

# **Long throat of a wormhole created from vacuum fluctuations**

Popov A.

*Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia*

---

## **Abstract**

The self-consistent solutions of the semiclassical Einstein field equations describing a long throat of a traversable Lorentzian wormhole are obtained. The vacuum fluctuations of quantized scalar fields serve as a source for this spacetime. © 2005 IOP Publishing Ltd.

<http://dx.doi.org/10.1088/0264-9381/22/24/002>

---